

WHAT IS CLAIMED IS:

- 1 1. A method for generating a status page to display on a computer display,
2 comprising:
3 receiving a request for status information on a resource;
4 determining an operation being performed with respect to the resource;
5 generating data to display a progress bar indicating a percent of the operation that
6 has completed, wherein a first part of the progress bar indicates a percent of the operation
7 that has completed and a second part of the progress bar indicates a percent of the
8 operation that has not completed;
9 determining an attribute of the operation; and
10 generating data to display information with one of the first part or second part of the
11 progress bar indicating the determined attribute of the operation.
- 1 2. The method of claim 1, wherein the determined attribute indicates a reason
2 the operation is being performed.
- 1 3. The method of claim 1, wherein the determined attribute is capable of
2 having one of multiple values, wherein the data to display the information indicating the
3 determined attribute further indicates the determined attribute value, wherein different
4 information is displayed for each attribute value.
- 1 4. The method of claim 1, wherein the information indicating the determined
2 attribute is displayed with the second part of the progress bar and further indicates a state
3 of the resource after the operation completes.

1 5. The method of claim 4, wherein displaying the first or second part with
2 information comprises displaying the first or second part of the bar in a manner that conveys
3 the information indicating the determined attribute value of the operation.

1 6. The method of claim 5, wherein displaying the first or second part of the
2 bar in the manner that conveys the information comprises displaying the first or second part
3 of the bar in a color that is associated with the determined attribute value of the operation,
4 wherein there are different colors associated with different attribute values.

1 7. The method of claim 1, wherein the resource comprises a storage device
2 and the operation comprises a formatting operation performed with respect to the storage
3 device.

1 8. The method of claim 7, wherein the determined attribute is capable of
1 indicating one of multiple possible sources of the formatting operation, wherein the
2 generated data to display the information indicating the determined attribute further indicates
3 the determined source of the formatting operation, and wherein different information is
4 displayed for each different source.

1 9. The method of claim 8, wherein the formatting operation comprises a
2 rebuild operation to reconstruct a storage space in the storage device, wherein the source
3 of the formatting operation is capable of comprising a modification to the configuration or a
4 failure within the storage device.

1 10. The method of claim 9, wherein displaying the first or second part of the
2 bar with information comprises displaying the first or second part of the bar in a color that is
3 associated with the determined source of the rebuild operation.

1 N1. The method of claim 7, wherein the storage device includes multiple
2 interfaces, wherein each interface is capable of engaging one storage unit, further
3 comprising:
4 generating data to display information on the status of each interface with the
5 displayed progress bar, wherein the information is capable of indicating that each interface
6 is empty or includes an available storage unit, wherein the formatting operation is performed
7 with respect to the available storage units engaged with the interfaces.

1 12. The method of claim 11, wherein the information on the status of each
2 interface is further capable of indicating whether the interface is engaged with a storage unit
3 that is available as a hot spare for use if one available storage unit engaged with another
4 interface fails.

1 13. The method of claim 12, wherein the storage device comprises a
2 Redundant Array of Independent Disks (RAID) and the storage units comprise hard disk
3 drives, and wherein the formatting operation is performed with respect to a logical storage
4 space that spans multiple of the available storage units.

1 14. The method of claim 7, wherein the storage device includes a network
2 interface and performs the steps of receiving the request for status information and
3 generating the data to display, wherein the request is received from a computer over the
4 network, further comprising:

5 adding the data to a file; and
6 transmitting the file over the network to the computer submitting the request.

1 15. The method of claim 14, wherein the file is capable of being rendered by an
2 Internet browser program.

1 16. A system for generating a status page to display on a computer display,
2 comprising:
3 means for receiving a request for status information on a resource;
4 means for determining an operation being performed with respect to the resource;
5 means for generating data to display a progress bar indicating a percent of the
6 operation that has completed, wherein a first part of the progress bar indicates a percent of
7 the operation that has completed and a second part of the progress bar indicates a percent
8 of the operation that has not completed;
9 means for determining an attribute of the operation; and
10 means for generating data to display information with one of the first part or second
11 part of the progress bar indicating the determined attribute of the operation.

1 17. The system of claim 16, wherein the determined attribute indicates a reason
2 the operation is being performed.

1 18. The system of claim 16, wherein the determined attribute is capable of
2 having one of multiple values, wherein the data to display the information indicating the
3 determined attribute further indicates the determined attribute value, and wherein different
4 information is displayed for each attribute value.

1 19. The system of claim 16, wherein the information indicating the determined
2 attribute is displayed with the second part of the progress bar and further indicates a state
3 of the resource after the operation completes.

1 20. The system of claim 19, wherein the means for generating data to display
2 the first or second part with information includes data to display the first or second part of

3 the bar in a manner that conveys the information indicating the determined attribute value of
4 the operation.

1 21. The system of claim 20, wherein the means for generating data to convey
2 the information generates data to display the first or second part of the bar in a color that is
3 associated with the determined attribute value of the operation, wherein there are different
4 colors associated with different attribute values.

1 22. The system of claim 16, wherein the resource comprises a storage device
2 and the operation comprises a formatting operation performed with respect to the storage
3 device.

1 23. The system of claim 22, wherein the determined attribute is capable of
1 indicating one of multiple possible sources of the formatting operation, wherein the
2 generated data to display the information indicating the determined attribute further indicates
3 the determined source of the formatting operation, and wherein different information is
4 displayed for each different source.

1 24. The system of claim 23, wherein the formatting operation comprises a
2 rebuild operation to reconstruct a storage space in the storage device, wherein the source
3 of the formatting operation is capable of comprising a modification to the configuration or a
4 failure within the storage device.

1 25. The system of claim 24, wherein generating data to display the first or
2 second part of the bar with information generates data to display the first or second part of
3 the bar in a color that is associated with the determined source of the rebuild operation.

1 26. The system of claim 22, wherein the storage device includes multiple
2 interfaces, wherein each interface is capable of engaging one storage unit, further
3 comprising:
4 means for generating data to display information on the status of each interface with
5 the displayed progress bar, wherein the information is capable of indicating that each
6 interface is empty or includes an available storage unit, and wherein the formatting operation
7 is performed with respect to the available storage units engaged with the interfaces.

1 27. The system of claim 26, wherein the information on the status of each
2 interface is further capable of indicating whether the interface is engaged with a storage unit
3 that is available as a hot spare for use if one available storage unit engaged with another
4 interface fails.

1 28. The system of claim 27, wherein the storage device comprises a Redundant
2 Array of Independent Disks (RAID) and the storage units comprise hard disk drives, and
3 wherein the formatting operation is performed with respect to a logical storage space that
4 spans multiple of the available storage units.

1 29. The system of claim 22, wherein the storage device includes a network
2 interface and performs the steps of receiving the request for status information and
3 generating the data to display, wherein the request is received from a computer over the
4 network, further comprising:
5 means for adding the data to a file; and
6 means for transmitting the file over the network to the computer submitting the
7 request.

1 30. The system of claim 29, wherein the file is capable of being rendered by an
2 Internet browser program.

1 31. An article of manufacture including code for generating a status page to
2 display on a computer display by:
3 receiving a request for status information on a resource;
4 determining an operation being performed with respect to the resource;
5 generating data to display a progress bar indicating a percent of the operation that
6 has completed, wherein a first part of the progress bar indicates a percent of the operation
7 that has completed and a second part of the progress bar indicates a percent of the
8 operation that has not completed;
9 determining an attribute of the operation; and
10 generating data to display information with one of the first part or second part of the
11 progress bar indicating the determined attribute of the operation.

1 32. The article of manufacture of claim 31, wherein the determined attribute
2 indicates a reason the operation is being performed.

1 33. The article of manufacture of claim 31, wherein the determined attribute is
2 capable of having one of multiple values, wherein the data to display the information
3 indicating the determined attribute further indicates the determined attribute value, wherein
4 different information is displayed for each attribute value.

1 34. The article of manufacture of claim 31, wherein the information indicating
2 the determined attribute is displayed with the second part of the progress bar and further
3 indicates a state of the resource after the operation completes.

1 35. The article of manufacture of claim 34, wherein displaying the first or
2 second part with information comprises displaying the first or second part of the bar in a
3 manner that conveys the information indicating the determined attribute value of the
4 operation.

1 36. The article of manufacture of claim 35, wherein displaying the first or
2 second part of the bar in the manner that conveys the information comprises displaying the
3 first or second part of the bar in a color that is associated with the determined attribute
4 value of the operation, wherein there are different colors associated with different attribute
5 values.

1 37. The article of manufacture of claim 31, wherein the resource comprises a
2 storage device and the operation comprises a formatting operation performed with respect
3 to the storage device.

1 38. The article of manufacture of claim 37, wherein the determined attribute is
1 capable of indicating one of multiple possible sources of the formatting operation, wherein
2 the generated data to display the information indicating the determined attribute further
3 indicates the determined source of the formatting operation, and wherein different
4 information is displayed for each different source.

1 39. The article of manufacture of claim 38, wherein the formatting operation
2 comprises a rebuild operation to reconstruct a storage space in the storage device, wherein
3 the source of the formatting operation is capable of comprising a modification to the
4 configuration or a failure within the storage device.

1 40. The article of manufacture of claim 39, wherein displaying the first or
2 second part of the bar with information comprises displaying the first or second part of the
3 bar in a color that is associated with the determined source of the rebuild operation.

1 41. The article of manufacture of claim 37, wherein the storage device includes
2 multiple interfaces, wherein each interface is capable of engaging one storage unit, further
3 comprising:

4 generating data to display information on the status of each interface with the
5 displayed progress bar, wherein the information is capable of indicating that each interface
6 is empty or includes an available storage unit, wherein the formatting operation is performed
7 with respect to the available storage units engaged with the interfaces.

1 42. The article of manufacture of claim 41, wherein the information on the status
2 of each interface is further capable of indicating whether the interface is engaged with a
3 storage unit that is available as a hot spare for use if one available storage unit engaged with
4 another interface fails.

1 43. The article of manufacture of claim 42, wherein the storage device
2 comprises a Redundant Array of Independent Disks (RAID) and the storage units comprise
3 hard disk drives, and wherein the formatting operation is performed with respect to a logical
4 storage space that spans multiple of the available storage units.

1 44. The article of manufacture of claim 37, wherein the storage device includes
2 a network interface and performs the steps of receiving the request for status information
3 and generating the data to display, wherein the request is received from a computer over
4 the network, further comprising:
5 adding the data to a file; and
6 transmitting the file over the network to the computer submitting the request.

1 45. The article of manufacture of claim 44, wherein the file is capable of being
2 rendered by an Internet browser program.

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